

Fostering collaborative research on functional materials for health, energy and sustainable development in Quebec

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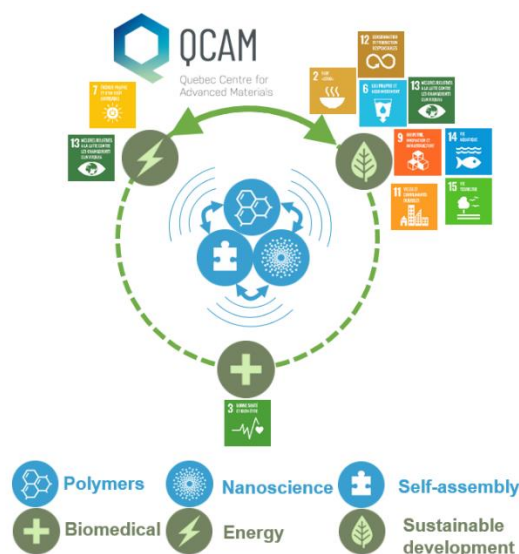
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Abstract (300-word limit)

The Quebec Centre for Advanced Materials (QCAM) is a strategic cluster funded by the Fonds de recherche du Québec – Nature et technologies. QCAM brings together more than 100 research groups working on polymers, nanoscience and self-assembly; it aims to provide materials-based solutions to health, energy and sustainable development issues. Research at QCAM is instrumental in reaching several of the UN Sustainable Development Goals (SDG – see image). On the other hand, our cluster contributes to strengthening the Quebec's advanced material ecosystem by liaising with the industry and governmental stakeholders. In addition, QCAM organize major events bridging the gap between academia and the industry.

In this talk, I will present QCAM's research scope and place it in the context of Quebec's R&D strategy. I will also describe how QCAM has helped to launch ambitious research projects leveraging its members' complementary expertise¹⁻³. The presentation will also address QCAM's international strategy and its future plans to launch joint initiatives with Maghreb countries, in particular Morocco.

Please insert Image/Figure



Recent Publications (maximum 5)

- 1 Yu, T. et al, *J. Mater. Chem. A* 11 (2023) 5037-5047
- 2 Nkeumaleu, A. T., et al. *RSC Adv.* 12 (2022) 11621-11627
- 3 Wang, M. et al. *Chem. Sci.* 11 (2020) 6653-6661

Biography



Matteo Duca is the Scientific affairs and development director of QCAM. He is also responsible for international collaborations and partnerships. From 2008 to 2019, he worked as electrochemistry researcher, specializing in electrocatalysis, bioelectrochemistry and battery materials. Dr Duca was awarded his PhD in 2012 from Leiden University (the Netherlands) with a thesis on the electrocatalysis of the nitrogen cycle. He was a Marie Curie fellow at the University of Oxford from 2014 to 2016. Dr Duca has published 23 peer-reviewed articles and 1 book chapter.